

QA-2A

(Revised 01-02-14)

**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
MIX DEFICIENCY PAY FACTOR / RETEST FORM**

PROJECT NO: [ 1 ]  
DATE PRODUCED: [ 3 ]  
CONTRACTOR: [ 5 ]  
TYPE MIX/ JMF: [ 7 ]  
INDIVIDUAL TEST LIMIT: [ 9 ]  
JMF TARGET: [ 11 ]

CONTRACT NO: [ 2 ]  
PROJECT ENGINEER: [ 4 ]  
PLANT LOCATION: [ 6 ]  
MIX DEFICIENCY: [ 8 ]  
RETEST LIMIT: [ 10 ]  
TONNAGE: [ 12 ]

TEST RESULTS: QC = [ 13 ]  
QA = [ 15 ]

V test (if run) = [ 14 ]  
DR test (if run) = [ 16 ]

QC SAMPLE # [ 17 ]

- 1) Is QC or V result outside Retest Limits compared to JMF? 

YES	or	NO
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 [ 18 ]
- 2) If YES to #1, then complete RETEST section below.
- 3) Is QC result outside Individual Limits compared to JMF? 

YES	or	NO
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 [ 19 ]
- 4) If YES to #3, calculate Pay Factor adjustment (%). [ 20 ]
- 5) Is V result outside Individual Limit but within Retest Limits? 

YES	or	NO
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 [ 21 ]
- 6) If YES to #5, then complete RETEST section below.

**RETEST Section**

SUBLOTS (tons) #1 = _____ #2 = _____ #3 = _____			Total Tonnage = <span style="border: 1px solid black; padding: 2px 20px;"> </span>	[ 22 ]		
Original sample taken from Sublot # _____	<table border="1" style="width: 100%; height: 80px;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> </table>				Show approximate location of retests on sublots	[ 23 ]
Retest Results	#1 = _____ #2 = _____ #3 = _____ #1 = _____ #2 = _____ #3 = _____	Original sample: QC Sublot sample: S-# Verification sample: V-#	[ 24 ]			
Recommended Action	#1 = _____ #2 = _____ #3 = _____		[ 25 ]			

**PROJECT ENGINEER'S FINAL ACTION**

The \_\_\_\_\_% pay factor specified above was applied on Estimate Number \_\_\_\_\_ Dated \_\_\_\_\_ [ 26 ]

Deficiency Location: \_\_\_\_\_

NOTE: For any mix accepted under Article 105-3, provide penalty assessed and justification: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
Signature: \_\_\_\_\_

Original To: Project Engineer

\* Contractor must be notified in writing by Project Engineer of any adjustment / action within 30 calendar days of original QC test.

CC: State Asphalt Design Engineer  
State Pavement Construction Engineer  
Division QA Supervisor  
Division Construction Engineer  
Area Roadway Construction Engineer

**QA-2A**  
**MIX DEFICIENCY PAY FACTOR / RETEST FORM**

**GENERAL NOTE:** This form shall be used for ALL mix deficiencies and retests (sublots). It is used in the determination of a pay factor for mix which does not meet Specification requirements. It shall be date and plant specific and used for only one mix deficiency, one project number, one type mix, and one JMF number. It will not be utilized for density deficiencies since the QA-2B form will be used for determining density deficiency pay factors. This QA-2A form is initiated by the Division QA Supervisor. The Division QA Supervisor is responsible for determining the actual adjusted pay tonnage and the initially recommended pay factor. Once this is completed and as soon as possible after the mix deficiency occurs, he will inform the Project Engineer and the Area Roadway Construction Engineer (RCE) for concurrence on the Pay Factor. The Area RCE approves all pay factors in HiCAMS. For any major or unresolved issues, contact the State Pavement Construction Engineer for questions of final determination. The original form shall then be returned to the Project Engineer for application and certification of any pay factor applied. The Project Engineer or a representative shall be responsible for distribution of the completed form.

1. Project number for which the mix was produced.
2. Contract number for which mix was produced.
3. Date deficient mix was produced.
4. Project Engineer's printed name (normally either Resident Engineer or District Engineer).
5. Contractor that produced the mix.
6. Location of asphalt plant producing deficient mix.
7. Type mix in which deficiency occurred and JMF number: i.e., RS9.5B / JMF# 15-0100-151.
8. Specific mix requirement not met (Gradation, AC Content, VTM, VMA, etc.), the amount results exceeded the requirement, and whether it applies to an individual test or the moving average.  
For example: VTM exceeded individual limit by 0.5%.
9. Individual Test Limit.
10. Retest Limit.
11. JMF Target.
12. Actual tonnage of deficient mix. This tonnage will be compiled by use of control charts, Form QC-1, and project weigh tickets.
13. Original QC test result.
14. Verification test result (if run in the same lot).
15. QA split test result.
16. Dispute Resolution (DR) test result.
17. Original QC Sample Number.
18. If the QC or V (if run) test results are outside Retest Limits compared to the JMF, then complete Retest section.
19. If the QC test results are outside Individual Limits compared to the JMF, but within Retest Limits, that becomes the penalty range and the Pay Factor adjustment shall be applied.
20. Calculate the Pay Factor adjustment. Reference [Section 609](#) of the Standard Specifications. This shall be a percentage of the unit bid price and not a reduction percentage.
21. If the V test results (if run) is outside Individual Limits, but within Retest Limits, then complete Retest section.
22. Determine SUBLOT tonnage breakdown and fill in the appropriate numbers. Total Tonnage should equal the amounts added from the breakdown and equal the tonnage in Item 12.
23. Fill out locations of tests in the boxes with original QC sample, Sublot samples and V-sample, if taken. Note that the location of the deficient mix sample shall be located on the roadway and random numbers not be used for the sublot.
24. Fill out Retest results in appropriate sections beneath the Sublot boxes.
25. QA Supervisor shall make recommendations on action(s) to be taken based on test results and confer with Project Engineer and Area RCE.
26. Fill out Final Action box with resolution of Pay Factor percentage or any asphalt removed and replaced in the Remarks section. If applying [Article 105-3](#) for mix acceptance, explain Final Resolution and justification. Then, sign the form and distribute to all parties in the cc list.